

The Alaska Energy Data Gateway: Bringing You More Information, More Easily



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FAI

- Mission
 - True to identity, heritage, and values, Alaska Natives are informed and engaged in leading the decisions that shape the future.
- Vision
 - Progress for the Next Ten Thousand Years
- Connects interns to different companies throughout AK



ISER

- ISER's Mission

- ISER enhances the well-being of Alaskans and others, through non-partisan research that helps people understand social and economic systems and supports informed public and private decision-making.



ISER

- Learning experience
 - Youngest in office
- My “Tasks”
 - Weekly mentoring
 - Always interacting with professionals with experience
 - The Alaska Energy Data Gateway (AEDG)
 - Updated and added to the site



Alaska Energy Data Gateway: Past

- The project was started in 2011, with a public launch in 2013
- The AEDG was one task of a DOE EPSCOR grant to the UA System
- Initially we only had the data search tool
 - Community members indicated the site wasn't as helpful as it could be
 - The Community Data Summary tool was added
 - 2/3rds of users now use the Community Data Summary tool
- We focused on energy data
 - PCE Program Data
 - Energy Statistics
 - Fuel prices

Alaska Energy Data Gateway: Present

- We've greatly expanded the number of data sets housed on the AEDG
 - Employment information from the ALARI portal
 - Education data
 - Erosion Information
 - AEA's Renewable Energy Fund data
- We've added new data to the Community Data Summary page
- Continued investment in data sets and system upkeep
 - ISER
 - AEA

Alaska Energy Data Gateway: Future

- Funding through Lawrence Berkeley National Laboratory
 - A task of the Alaska Microgrid Partnership
- Partnering with the Alaska Center for Energy and Power (ACEP)
- Project Goals:
 - Add data sets that help fill in holes in the AEDG
 - Modernize the look of the AEDG
 - Add a user friendly tool to quickly view data availability and compare data availability between communities

Community Metric Explorer

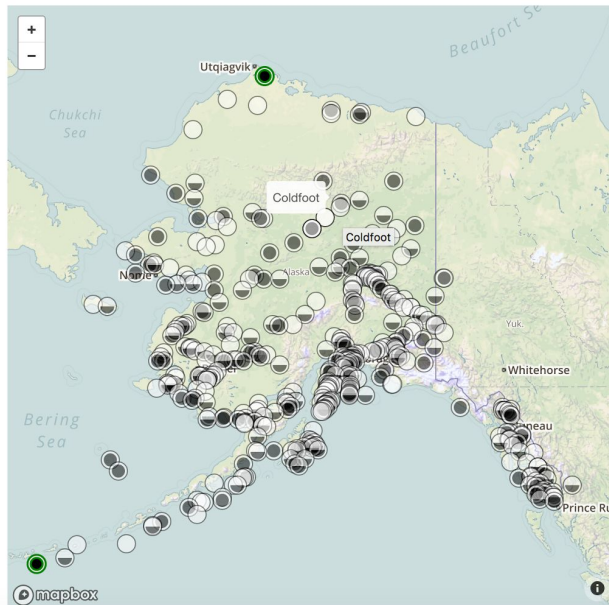
Step 1: Select a Metric Category

Financial Capacity Metrics

Human Capacity Metrics

Technical Capacity Metrics

Step 2: Select Your Communities



Communities

AEA Energy Regions

Census Areas

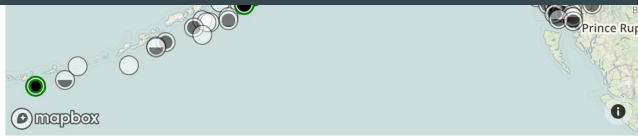
	Community Name	Data Category	Data Availability	Community Data Summary
<input checked="" type="checkbox"/>	Adak	Human		→
<input type="checkbox"/>	Afognak	Human		→
<input type="checkbox"/>	Akiok	Human		→
<input type="checkbox"/>	Akiachak	Human		→
<input type="checkbox"/>	Akiak	Human		→
<input type="checkbox"/>	Akutan	Human		→

Clear
Selection

Search table...

Legend

Lots of data
availableA fair amount of
data availableLittle to no data
availableMetric does not
exist for this
community



Legend

- Lots of data available
- A fair amount of data available
- Little to no data available
- Metric does not exist for this community

Step 3: View Metrics for Communities

Human Capacity Metrics for Selected Communities

Metric	Adak (+)	Aleknagik (+)	Barrow (+)	Chignik (+)	Chignik Lagoon (+)	Chignik Lake (+)	Clark's Point (+)
Census Data by Age Bracket for Census Area	—		—				
Census Data By Age Bracket for Community		—		—			
Census Data by Community				—			
AK DOL Employment Summary Data by Census Area			—	—			
AK DOL Employment Summary Data by Community			—		—		
AK DOL Occupation Data by Census Area	—						
AK DOL Occupation Data by Community						—	
Population Estimates by Census Area			—	—			
Population Estimates by			—		—		

Contribute Data for Adak

Thank you for your interest in contributing data to the Alaska Energy Data Gateway. Please select any of the datasets list below that you'd like to contribute data towards, or select other and provide some details about your data.

An administrator will contact you about your data.

- ☐ Census Data by Age Bracket for Census Area
- ☐ Census Data By Age Bracket for Community
- ☐ Census Data by Community
- ☐ AK DOL Employment Summary Data by Census Area
- ☐ AK DOL Employment Summary Data by Community
- ☐ AK DOL Occupation Data by Census Area
- ☐ AK DOL Occupation Data by Community
- ☐ Population Estimates by Census Area
- ☐ Population Estimates by Community
- ☐ Other

Name

Human Capacity Metrics for Selected Communities

Metric	Adak ⁺	Aleknagik ⁺	Barrow ⁺	Chignik ⁺	Chignik Lagoon ⁺	Chignik Lake ⁺	Clark's Point ⁺
Census Data by Age Bracket for Census Area	—	●	—	○	●	●	○
Census Data By Age Bracket for Community	◐	—	○	—	◐	●	●
Census Data by Community	◐	◐	◐	—	●	●	◐
AK DOL Employment Summary Data by Census Area	●	○	—	—	◐	○	●
AK DOL Employment Summary Data by Community	●	○	—	◐	—	◐	●

◐ A fair amount of data available

○ Little to no data available

— Metric does not exist for this community

Census Data by Age Bracket for Census Area

Data Source: Alaska Energy Authority

Data Resolution: Yearly

Data Available: 2007 - 2013

Data Format: CSV, Excel, or SPSS

View data set filtered for [Adak](#)

What have I updated?

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AHFC Fuel Survey Data

FCS Utilities Data

ALARI Data

Industry - Occupation - Summary

Alaska Housing Finance Corporation Fuel Survey Data

- Biyearly Survey includes:
 - Fuel price 1 & 2, Propane price, and prices of various cords of woods
- Not publicly accessible
 - Emailed directly with Jimmy Ord and Scott Waterman
- Sporadic historical data
 - Uploaded 2015-2017
 - Date checked AEDG data



UAF Food Cost Survey Utilities Data

- Quarterly Survey Includes
 - Food costs broken down by male, female, age, family throughout AK
 - Utilities included: Electricity 1,000 kwh, Heating oil, Regular Gas, Propane 100lbs, 2x4x8
- Downloadable public data
 - Last report on AEDG was Q2 of 2013
 - Emailed Bret Luick
 - Looked through FCS data from Q2 of 2013-present
 - Found 3 non-consecutive quarters containing utility
 - Updated the AEDG to contain most recent data



Alaska Local and Regional Information Data

- Community Data Includes
 - Population, Worker information, and Unemployment information
 - 3 Sub-categories for the AEDG
 - Employment by Industry
 - Employment by Occupation
 - Employment Summary Data



Alaska Local and Regional Information Data

- Employment by Industry (2015)- scraped from site
 - City, Year, Industry name, # of employed, female, male, age 45 up, age 50 up
- Employment by Occupation (2015)- scraped from site
 - Gov't/private sector, quarter breakdown, new hires, unemployment, industry
- Employment Summary Data (2012-2015)- emailed from Jeanne Biller
 - Everything from occupation, plus workers with previous industry experience



What's new?



Alaska Taxable Data
AEA Sponsored AVTEC training Data
Community Aid Program Data

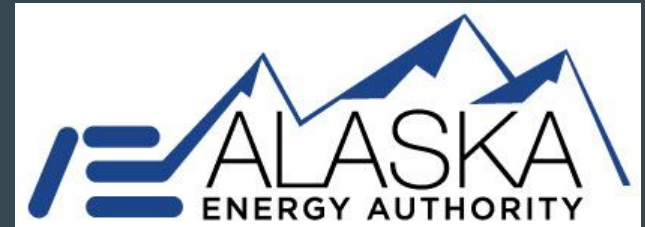
Alaska Taxable Data (2001-2016)

- Per Capita Tax Revenues Include
 - Municipality, Property Tax (Inc. Oil & Gas), Sales Tax, Other Taxes*, Total Taxes Reported, and Per Capita Revenue by city where municipality collects both city and borough taxes
- Downloadable public data from DCRA site
 - Many more downloadable reports than just Per Capita
 - Per Capita is Consistently reported for all years (2001-2016)
- *Other Taxes include:
 - Bed, Alcohol, Car Rental Tax, Raw Fish, Tobacco, Misc Special



AEA Sponsored AVTEC Training Data (1995-2017)

- Data-Set Includes
 - Community, Fiscal Year of training, Course Title, and how many people completed the course (e.g. Akiachak, 2005, Bulk Fuel Operator, 2)
- Not Publicly Accessible
 - Sent to us by Neil McMahon of AEA
- Since it wasn't previously available, and the data is very specific, I worked with Neil a lot to work out the metadata



Community Assistance Program Data (formerly Community Revenue Sharing)

- CAP Background

- Established in 2008 as the Community Revenue Sharing Program
- Provides funds to deliver basic public services each fiscal year
 - The exact services is the decision of the community

“If the amount of funding available exceeds the amount necessary to fully fund all the basic community revenue sharing payments, the balance is distributed on a per capita basis excluding the unincorporated communities located within organized boroughs.” Community Revenue Sharing Overview



Community Assistance Program Data (formerly Community Revenue Sharing)

- Status Report Includes
 - Community (Municipality or Unincorporated), Program year, Payment amount, Application information, Payment Authorization
 - Application Includes: Actual Application (sent out to eligible communities), Budget for fiscal year of grant or of calendar year from year prior, and Audit or certified financial statement of fiscal year two years prior
- Downloadable PDF files
 - We needed it in Excel or CSV files
- Emailed a few people and reached out to the FAI cohort
 - Historic data (2009-2017) and instructions for PDF to Excel



What can one do with this data?

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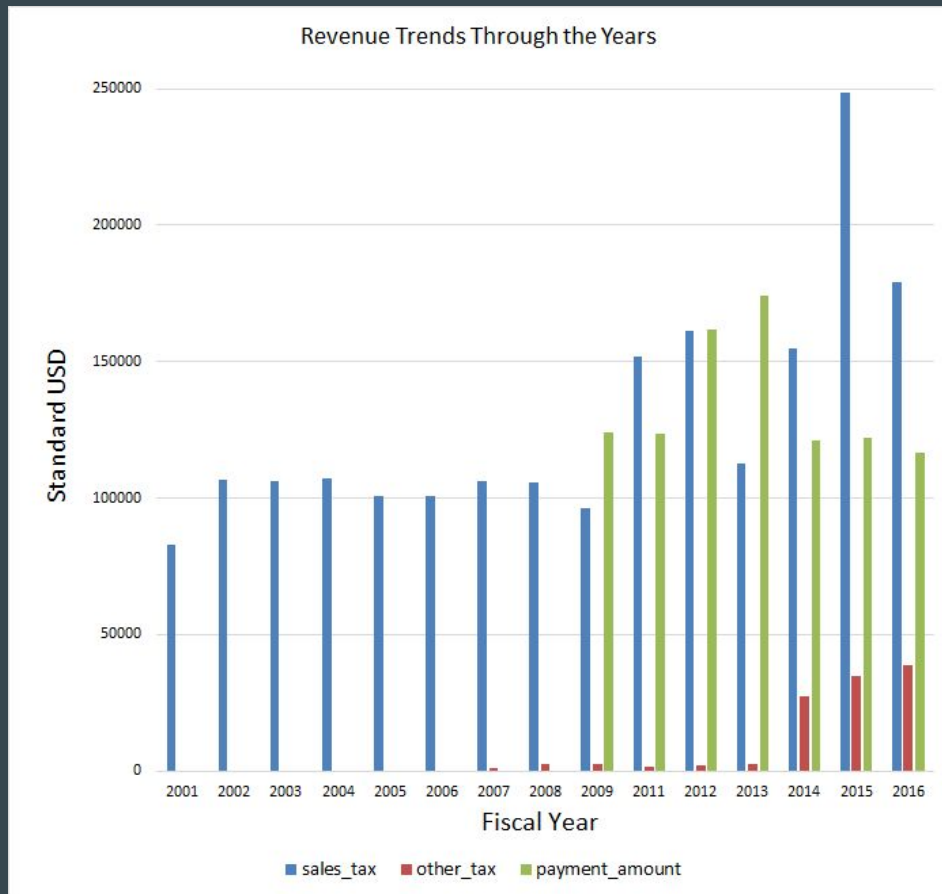
Community Specific Trend Analyses of Alaska Taxable and
Community Assistance Program

St. Mary's Revenue Analysis



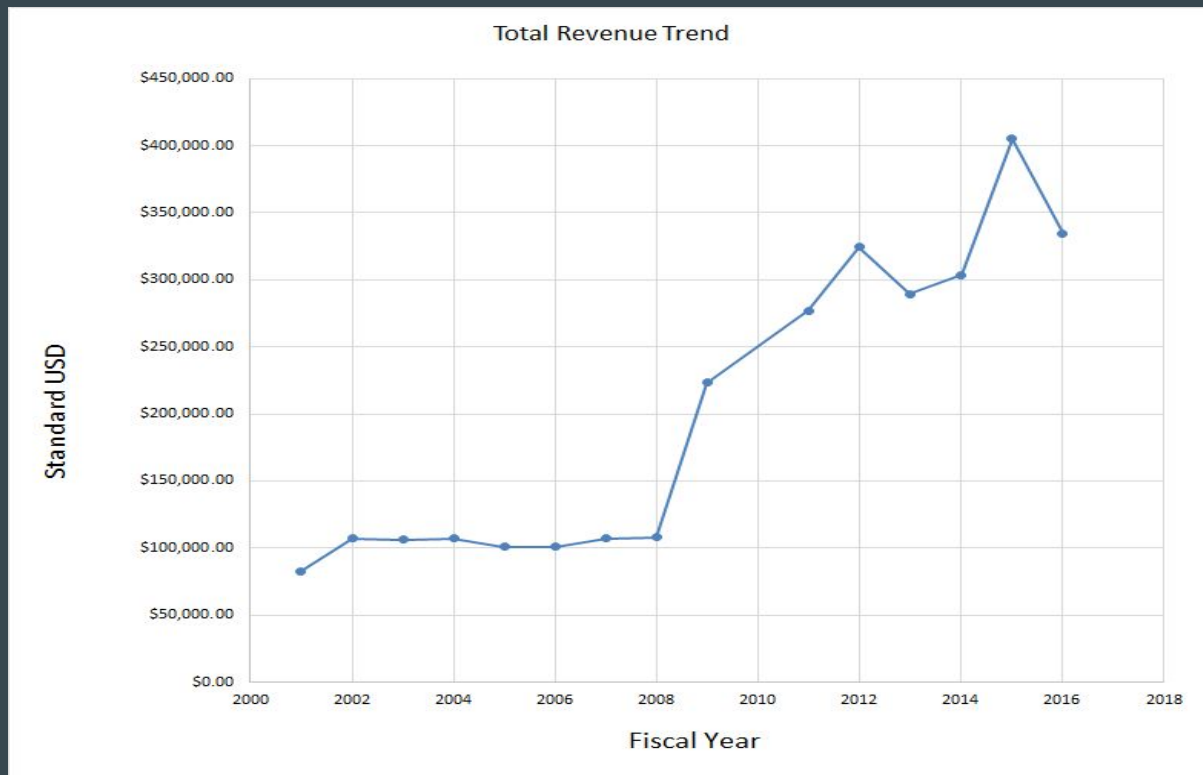
St. Mary's Revenue Analysis

- CAP Begins in 2009
 - Spikes in 2012-2013
- Other Taxes Begin in 2007
 - Jumps in 2014
- Sales Tax remains through all years
 - Jumps in 2011
 - Spikes in 2015



St. Mary's Revenue Analysis

- Pre-CAP
 - Steady
 - Low Total Rev
- Post-CAP
 - Jump in 2009
 - Spikes in 2012 & 2015
- Despite spikes, steady rise in total revenue

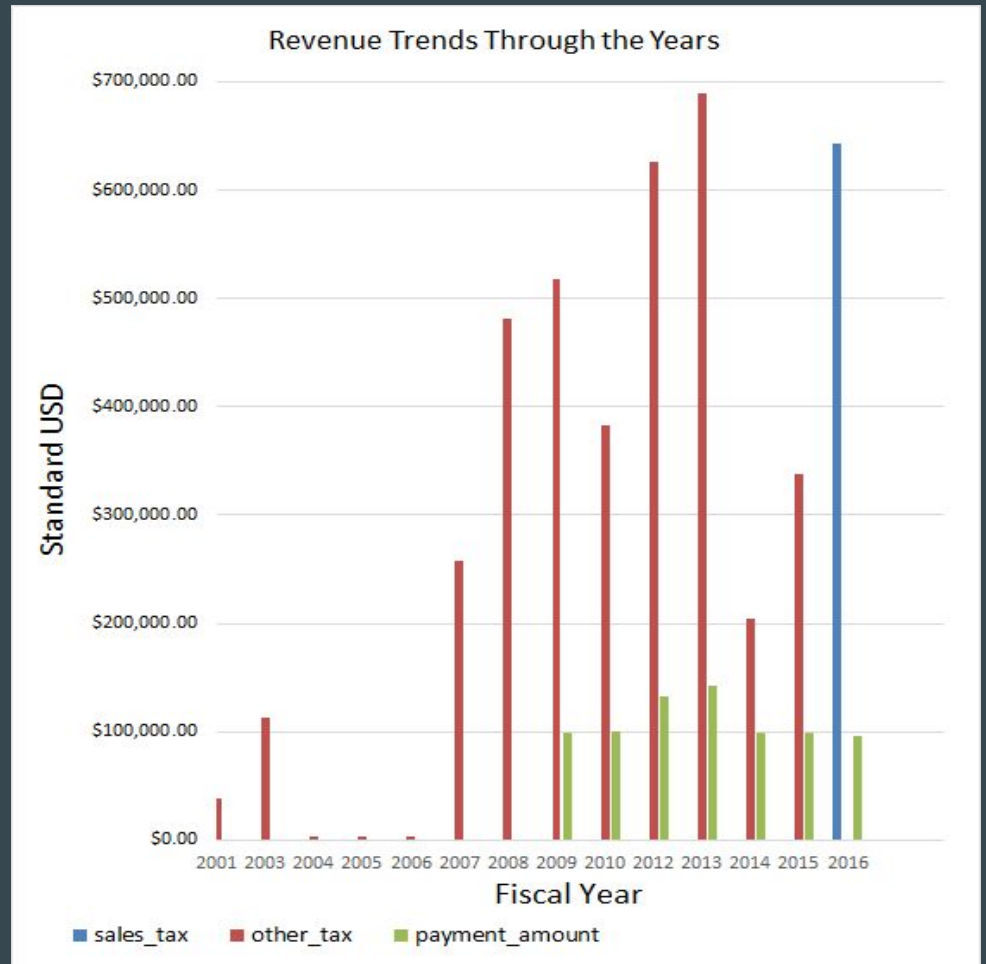


Pilot Point Revenue Analysis



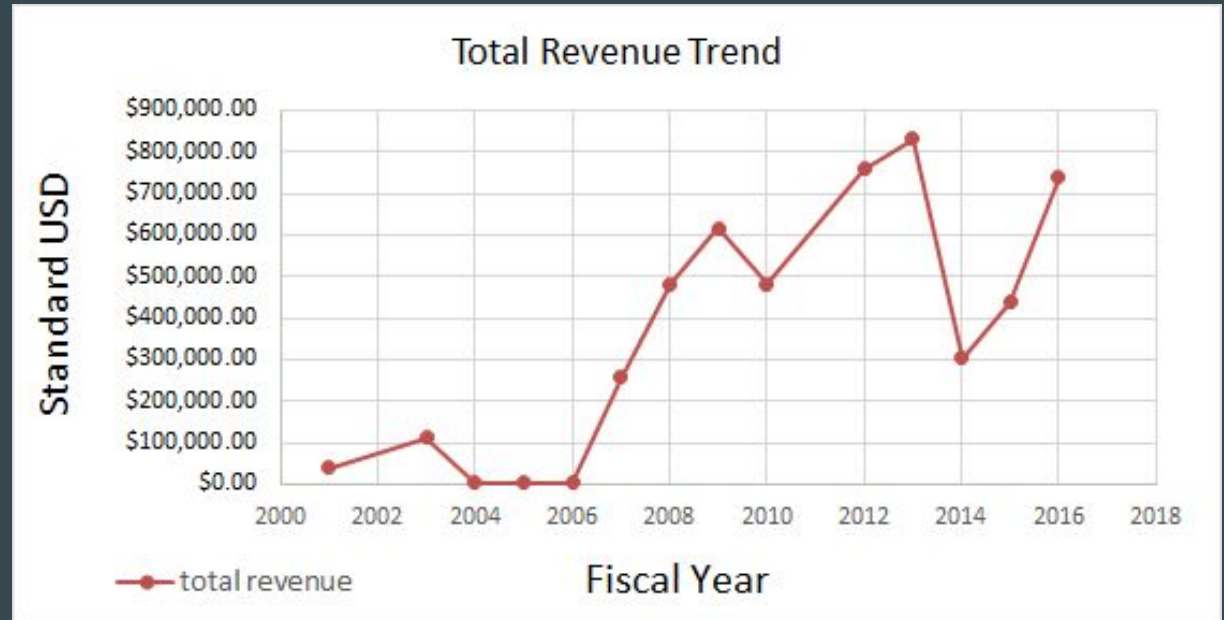
Pilot Point Revenue Analysis

- CAP Begins in 2009
 - Spikes in 2012 & 2013
- Other Taxes
 - Drops 2004-2006
 - Ends in 2016
 - Drops 2010 & 2014
- Sales Taxes
 - Begins in 2016



Pilot Point Revenue Analysis

- Pre-CAP
 - Inconsistent
 - Low Total Rev
 - Rising quickly
- Post-CAP
 - Drops in 2010 & 2014-2015
- Despite drops, slight curve



St. Mary's (KSM) vs. Pilot Point (PIP)

Similarities

- Rural communities
- Dramatic increase in Total Revenue Post-CAP
- CAP spiked in 2012-2013
- Inconsistencies Post-CAP became more dramatic

Differences

- PIP= fishing community
- KSM= relied on Sales, increasing Other
- PIP= relied on Other, switched to Sales

Questions this raises

- Why was there a spike in CAP in 2012-2013?
- Has the CAP affected Tax revenue for communities?
- Has changes in Tax income sources for one community affected Tax income sources for those in the same region?
- Will these trends continue through time?
- Mouhcine Guettabi- Professor of Economics at ISER
 - Report on CAP affecting Boroughs throughout Alaska
- There are so many more questions, all you have to do is ask!

What Have I Learned?

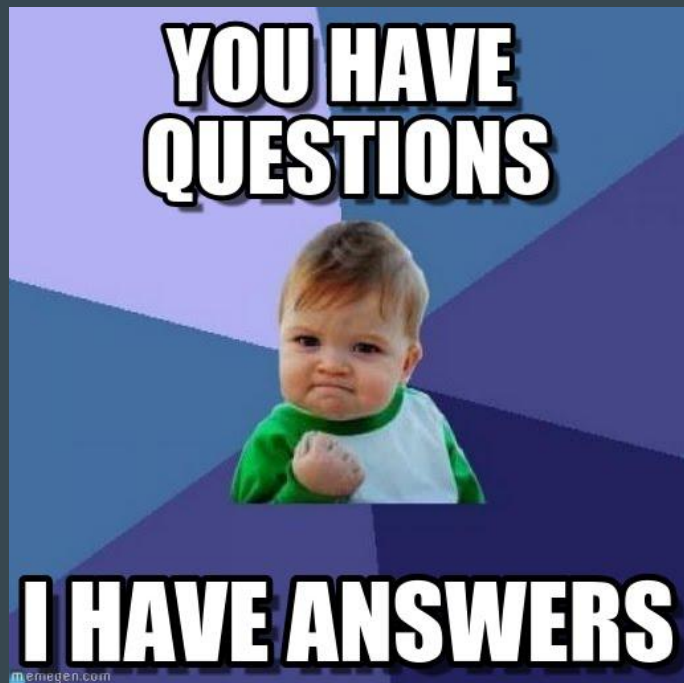
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ISER Mentoring Time
FAI Leadership Training

The Big Takeaways

- Your background doesn't have to define you
- Each obstacle has its own paths to a solution
 - “It's always the question that guides the actions”
- Excel is a wonderful tool... when you know how to use it
- Speak up about your problems, because you never know who has connections to get you answers

Questions?



MemeGen

Data Links

ISER- <http://www.iser.uaa.alaska.edu/>

AEDG- <https://akenergygateway.alaska.edu/>

UAF FCS- <https://www.uaf.edu/ces/hhfd/fcs/>

ALARI- <http://live.laborstats.alaska.gov/alari/>

AK Taxable- <https://www.commerce.alaska.gov/dcra/dcrarepoext/Pages/AlaskaTaxableDatabase.aspx>

CAP- <https://www.commerce.alaska.gov/dcra/eGrantsOnLine/Pages/RevenueSharing.aspx>

Mouhcine Guettabi-

http://www.iser.uaa.alaska.edu/Publications/2017_06-RegionalAssessmentBorGovFinEmployment.pdf